CHAPTER 8 & 12 ACCELERATED CHEMISTRY REVIEW SHEET

Shapes/Polarity/IMF

The test contains approximately 35 total questions – 22 multiple choice, 2 fill in the blank, & 11 short answer. You should study the following review sheet, your previous quiz, book problems, and practice quizzes and worksheets. Tests are weighted at 60% of your grade so be sure to prepare properly.

For the test you should be able to:

- 1. Identify and determine the number of sigma and pi bonds in a molecule
- 2. Compare the strength and length of various covalent bonds
- 3. Identify the shapes and angles of molecules
- 4. List the 7 diatomic molecules
- 5. Describe the typical bonding of carbon
- 6. Determine the number of valance electrons an atom, ion, or molecule has
- 7. Use a table of electronegativity's to determine the bond type
- 8. Name covalent molecules (review)
- 9. Draw lewis structures to determine molecular shape
- 10. Identify the 3 exceptions to the octet rule
- 11. Identify the type of hybrid a molecule contains
- 12. Describe an inter and intra molecular force
- 13. Compare the relative strength of Inter molecular forces
- 14. Read a chart on crystalline solids and determine the properties of various solids
- **15. Describe the octet rule**
- 16. Compare polar molecules with non-polar molecules
- 17. Given a lewis structure predict molecular shape
- 18. Count the number of bonded and non bonded pairs of electrons around a central atom
- 19. Describe how the strength of intermolecular forces helps to determine the state of matter
- 20. Describe the characteristics of a polar bond or a polar molecule
- 21. Draw 3-dimensional shapes of molecules